

REMARKS

Claims 1-4, 10-17, 22-24, and 26-28 have been amended. Claims 1, 12, and 24 have been amended to more clearly define Applicants' invention. Claims 2-4, 10, 11, 13-17, 22, 23, and 26-28 have been amended to correct certain informalities. No new matter has added. Claims 1-4 and 6-29 remain pending. Reconsideration and allowance of the present application based on the foregoing amendments and the following remarks are respectfully requested.

In the Office Action, claims 1-4 and 6-29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kazerooni (U.S. Patent No. 6,386,513) in view of Anderson et al. (U.S. Patent No. 5,590,046). Applicants respectfully traverse this rejection.

Claim 1 is directed to an intelligent trolley module for use in an assist system that includes, *inter alia*, a plurality of wheels on the intelligent trolley module and configured to move the trolley module along a track, an actuator on the intelligent trolley module for driving at least one of the wheels in a horizontal direction, a computational node on the intelligent trolley module for controlling the actuator, and a communication interface on the intelligent trolley module for providing input/output communication between the intelligent trolley module and other intelligent modules.

Claim 12 is directed to an intelligent lift module for use in an assist device that includes, *inter alia*, an actuator on the intelligent lift module, a support connected to the actuator and configured to move a payload in a substantially vertical direction, a computational node on the intelligent lift module in communication with the actuator and configured to control movement of the payload, and a communication interface on the intelligent lift module for providing input/output communication between the intelligent trolley module and other intelligent modules.

Claim 24 is directed to an input device for use in an assist system that includes, *inter alia*, a handle for gripping, and at least one proportional control. The input device is in communication with a multi-function hub, wherein the proportional control when moved provides a proportional output signal to the multi-function hub, and wherein the multi-function hub passes the output signal to the assist system.

Kazerooni discloses a human power amplifier (10) that includes a take-up pulley (11) that is attached directly to a ceiling, wall, or overhead crane and an actuator (12) that drives the take-up pulley (11). (Kazerooni at col. 5, lns. 23-26.) The actuator (12) is driven by a **separate** controller (20) via a power cable (23). (Kazerooni at col. 6, lns. 47-48, FIGs. 1 and

8.) The actuator (12) that drive the take-up pulley (11) may be connected to a trolley (81). (Kazerooni at col. 15, ln. 67, FIG. 9.) As conceded by the Examiner, Kazerooni does not disclose an actuator for driving at least one of the wheels, and a computational node.

Anderson et al. discloses an automated floor panel workcell having a plurality of machines for performing cutting and other operations on panels of sheet material. (Anderson et al. at col. 2, lns. 16-18.) The machines are not intelligent modules as recited by the claims.

Also, in regards to claim 1, Applicants submit that neither Kazerooni nor Anderson et al. discloses or suggests an intelligent trolley module that includes, *inter alia*, a communication interface **on** the intelligent trolley module for providing input/output communication between the intelligent trolley module and other intelligent modules, as recited by claim 1.

Also, in regards to claim 12, Applicants submit that neither Kazerooni nor Anderson et al. discloses or suggests an intelligent lift module that includes a communication interface **on** the intelligent lift module for providing input/output communication between the intelligent lift module and other modules, as recited by claim 12.

Further, in regards to claim 24, Applicants submit that neither Kazerooni nor Anderson et al. discloses or suggests – at least – an input device for use in an assist system that is in communication with a multi-function hub, wherein the proportional control when moved provides a proportional output signal to the multi-function hub, and wherein the multi-function hub passes the output signal to the assist system, as recited by claim 24.

Moreover, Applicants submit that there is simply no motivation for one of ordinary skill in the art to combine Kazerooni with Anderson et al. because Anderson et al. expressly teaches away from such a combination. While the human power amplifier of Kazerooni expressly requires human interaction as shown in FIGs. 1 and 16, Anderson et al. expressly states that “it is an object of this invention to provide a system for manufacturing parts from flat material, requiring **little or no operator intervention** from the insertion of the flat material sheets at the input end to the removal of the finished parts from the output end.” (Anderson et al. at col. 1, lns. 46-50 (emphasis added), FIG. 1.) Applicants submit that without any motivation to combine Kazerooni with Anderson et al., the Examiner has failed to make a *prima facie* of obviousness. Also, Applicants submit that even when combining Kazerooni with Anderson et al., the combination does not disclose or suggest all of the limitations of claims 1, 12, and 24, and the claims that depend from them.

Accordingly, Applicants respectfully submit that claims 1, 12, and 24, and the claims that depend from them, are patentable over Kazerooni in view of Anderson et al. and respectfully request that the rejection be withdrawn.

In the Office Action, claims 7 and 8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kazerooni in view of Santos (U.S. Patent No. 3,451,507). Applicants respectfully traverse this rejection.

Claims 7 and 8 depend from claim 1. As discussed above, the Examiner has conceded that Kazerooni does not disclose an actuator for driving at least one of the wheels, and a computational node. Santos does not make up for the deficiencies of Kazerooni. Nowhere does Santos disclose an intelligent trolley module that includes, *inter alia*, an actuator on the intelligent trolley module for driving at least one of the wheels in a horizontal direction, a computational node on the intelligent trolley module for controlling the actuator, or a communication interface on the intelligent trolley module for providing input/output communication between the intelligent trolley module and other intelligent modules. Accordingly, Applicants submit that the Examiner has failed to make a *prima facie* of obviousness and respectfully submit that claims 7 and 8 are patentable over Kazerooni in view of Santos and respectfully request that the rejection be withdrawn.

In the Office Action, claims 1-4 and 6-29 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-31 of copending Application No. 09/781,686.

As was stated in "Supplemental Remarks to Response to Office Action Mailed December 26, 2002," filed May 2, 2003, Applicants acknowledged the provisional obviousness-type double patenting rejection made by the Examiner. Applicants respectfully submit that, as discussed above, the claims pending in the present application are directed to an intelligent trolley module for use in an assist system, an intelligent lift module for use in an assist device, and an input device for use in an assist system, whereas the claims of copending application number 09/781,686 are directed to a multi-function hub for use in an assist system. However, should both applications proceed to issuance such that it becomes necessary to file a terminal disclaimer, Applicants currently intend to file a terminal disclaimer at that time to overcome this rejection.

All rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited. If

any point remains at issue which the Examiner feels may best be resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975, control number 007448-0303801. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,
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